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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,093	10/06/2003	Isao Ota	111398.01	4464

25944 7590 08/17/2005

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/678,093	Applicant(s) OTA ET AL.	
	Examiner Michael A. Marcheschi	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/980685.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>10/6/03</u> | 6) <input type="checkbox"/> Other: |

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The disclosure is objected to because of the following informalities:

The specification is objected to because it does not define the updated information for the parent application.

Appropriate correction is required.

Claim 2 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is indefinite as to the limitation “other rare earth oxides” because claim 1 never defines that other rare earth oxides, besides cerium oxide, are present in the abrasive.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as obvious over either (1) Kasai et al. (343), (2) Ota et al. or (3) Abbasi et al.

Kasai et al. (343) teach in column 6, lines 35-45, column 9, lines 16-25, column 12, line 32 and the claims, a cerium (IV) oxide abrasive stable slurry (having the claimed concentration)

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for polishing a glass substrate which comprises cerium (IV) oxide (this is produced using the method defined in the reference) have the claimed size and surface area.

Ota et al. teach in the abstract and column 3, lines 27-60, a cerium (IV) oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium (IV) oxide (this is produced using the method defined in the reference) have the claimed size and surface area.

Abbasi et al. teach in the abstract, column 3, lines 15-26 and the claims, a cerium (IV) oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium (IV) oxide (this is produced using the method defined in the reference) have the claimed size and surface area.

The references teach polishing glass substrates (reads on the claimed material) with a cerium oxide abrasive slurry (claimed concentration of cerium oxide) by using cerium oxide having claimed size and surface area. In view of this, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as obvious over either (1) Yoshida et al. (118), (2) Kido et al., or (3) Matsuzawa et al..

Yoshida et al. (118) teach in the abstract, column 2, lines 60-61, column 3, line 35-column 4, line 51 and column 6, lines 33-34, a cerium oxide abrasive slurry (having the claimed

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concentration) for polishing a glass substrate which comprises cerium oxide have the claimed size and surface area.

Kido et al. teach in column 3, line 47-column 4, line 50, column 5, lines 13- 15 and column 6, lines 18-20, a cerium oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium oxide have the claimed size and surface area.

Matsuzawa et al. teach in column 7, line 43-column 8, line 60, column 10, lines 54-55 and column 15, lines 30-31, a cerium oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium oxide have the claimed size and surface area.

The references teach polishing glass substrates (reads on the claimed material) with a cerium oxide abrasive slurry (claimed concentration of cerium oxide) by using cerium oxide having claimed size and surface area. In view of this, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). Although the references do not literally define that cerium (IV) oxide is used, the broad interpretation of cerium oxide, as defined by the references, reads on cerium (IV) oxide because “a generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971). In addition, burden is upon applicants to show that the cerium oxide is different.

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Claims 1-2 are rejected under 35 U.S.C. 103(a) as obvious over either (1) Yoshida et al. (976) or (2) Homma et al.

Yoshida et al. (976) teach in the abstract, column 6, lines 31-38 and column 8, lines 30-31, a cerium oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium oxide have the claimed size.

Homma et al. teach in column 1, lines 5-8, column 3, lines 9-11 and claim 10, a cerium oxide abrasive slurry (having the claimed concentration) for polishing a glass substrate which comprises cerium oxide have the claimed size.

The references teach polishing glass substrates (reads on the claimed material) with a cerium oxide abrasive slurry (claimed concentration of cerium oxide) by using cerium oxide having claimed size. In view of this, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976). Although the references do not literally define that cerium (IV) oxide is used, the broad interpretation of cerium oxide, as defined by the references, reads on cerium (IV) oxide because **“a generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971).** In addition, burden is upon applicants to show that the cerium oxide is different.

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In all of the above rejections, it is the examiners position that the stability of the slurry is expected because the composition is the same and the same composition is expected to act in the same manner absent evidence to the contrary (i.e. the examiners position that all of the slurries can be stable to an extent).

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356. To establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside (i.e. as well as the upper and lower limits) the claimed range to show the criticality of the claimed range. ***In re Hill* 284 F.2d 955, 128 USPQ 197 (CCPA 1960).**

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The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

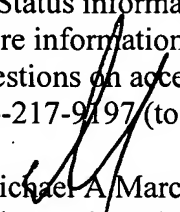
Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/05
MM


Michael A Marcheschi
Primary Examiner
Art Unit 1755